

# PATENT ABSTRACTS OF JAPAN

(11) Publication number : 05-315313

(43) Date of publication of application : 26. 11. 1993

(51) Int. Cl.

H01L 21/304  
B08B 3/12

(21) Application number : 04-113858 (71) Applicant : FUJITSU LTD

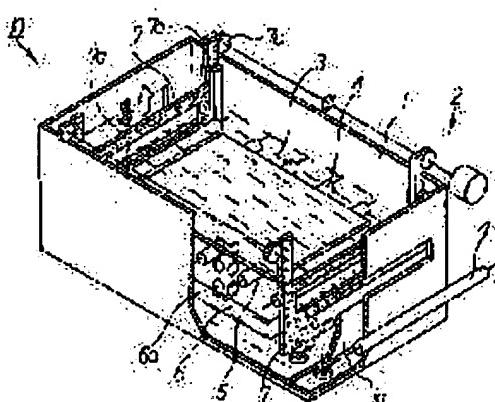
(22) Date of filing : 07. 05. 1992 (72) Inventor : MAJIMA NIWAJI  
WATANABE KAZUHIRO  
WATASHIRO MINEO

## (54) LEAF-TYPE ULTRASONIC PROCESSING EQUIPMENT

### (57) Abstract:

PURPOSE: To conduct the most efficient processing by placing an object to be processed on loops of standing wave generated in processing liquid.

CONSTITUTION: A leaf-type ultrasonic processing equipment 10 consists of a processing bath 1 and a liquid surface raising means 2. Processing liquid 3 is made to flow abundantly by being partitioned by bulkheads 1a which are provided in front and at back of the processing bath 1. An ultrasonic transmitter 6 is provided on the bottom of the processing bath 1. Ultrasonic processing can be conducted at the optimum efficiency, if rising up of movable bulkheads 7 is controlled in such way that the height of liquid surface of the processing liquid 3 which has been raised up from an object to be processed has relation with wavelength L of standing wave generated in the processing liquid 3, as the formula of  $H=L/2$  indicates. As a result, processing time can be shortened by obtaining the most efficient processing effects.



### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

**Best Available Copy**